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**IMPLEMENTATION OF MANAGEMENT INFORMATION SYSTEMS IN  
ASSESSING ORGANIZATIONAL PERFORMANCE USING DELONE &  
MCLEAN IS SUCCESS AT BSI BANDUNG**



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**Abstract**

In the last decade, Management Information Systems (MIS) have become an essential element in business operations in Indonesia. Management information systems have evolved from data storage tools to decision support systems essential for a dynamic business environment. Data were collected by distributing questionnaires directly to 20 Islamic Banking employee respondents. This method uses the Delone & McLean Is Success Model, which is a model for testing the success of information systems management that is seen based on 6 dimensions, namely system quality, information quality, use quality, satisfaction quality, performance effectiveness, and the last is organizational performance. The results of the study indicate that the implementation of Management Information Systems at PT Bank Syariah Indonesia (Persero) Tbk. Bandung is in the high to very high category based on the DeLone & McLean Model. User satisfaction is 86%, becoming the highest value, which indicates that the system has met employee needs and supported operational activities optimally.

**Keywords:** Information Systems Management, Organizational Performance, Organizational Learning, and Delone & McLean Is Success

## INTRODUCTION

The rapid development of information technology (Hayati & Rukhviyanti, 2022) has encouraged companies to increasingly rely on information systems to manage their operational (Novi Rukhviyanti, 2025) aspects, including financial management (Agus Eko Musantono et al., 2025). One of the competitive advantages that banks generally have is service through improving human resources based on employee performance (Mhd.Ari et al., 2024). This makes the influence of Management Information Systems (MIS) crucial as a tool to support strategic decision-making at various organizational levels (Renaldo et al., 2022). According to (Miharja & Rukhviyanti (2024) , human resources play a strategic role because they are the driving force of the organization. To be effective, human resources must.

With today's intense competition (Oktaviane & Rukhviyanti, N., 2026) in the banking world, Islamic banks, particularly Bank Syariah Indonesia, are striving to implement management strategies to improve service quality (Harahap et al., 2025). Therefore, this study not only highlights the importance of Management Information Systems in facing the challenges of local and global competition (Rukhviyanti & Ambarwati, 2023) but also explores the factors influencing the implementation and effectiveness of Management Information Systems in the Indonesian business context (Anugrah et al., 2024).

While the DeLone and McLean model has been widely used in information systems research, several challenges remain to be addressed in its implementation in the public sector. One major challenge is resistance to change among government employees (Riyanto et al., 2023). Many employees are accustomed to manual work methods and lack skills in using digital technology. Therefore, (Tambunan & Rukhviyanti, 2025) improving digital literacy and implementing effective training programs are crucial steps to ensure the successful adoption of Management Information Systems.

Competition in the banking and financial services industry is increasingly intense (Zatnika & Rukhviyanti, 2024), requiring banks to meet the needs and desires of their customers because each bank will compete for the hearts of its customers. Bsi Bandung has a strategy to satisfy customers by providing maximum service (Hasballah, 2023). According to (Mhd.Ari et al., 2024), the services provided can create trust if customers are satisfied with the services provided, then it will make customers loyal to the bank. According to Sari & Sukardi, 2023), based on a comparison of data analysis, it was found that quantitative data, system quality shows that the respondent achievement rate (TCR) reached 88.07%, which is certainly categorized as good. Information quality shows that TCR reached 87.36%, which is also categorized as good. Service quality can be seen that TCR reached 87.76%, which is categorized as good. Usage that TCR reached 88.24% is certainly categorized as good. User satisfaction that TCR reached 88.73% is certainly categorized as good. The TCR benefit of reaching 84.10% is certainly also categorized as good.

The development of information technology encourages banking organizations to utilize Management Information Systems (MIS) (Asro et al., 2024) to support operational processes and decision-making. However, in practice, there are still problems related to the effectiveness of information system implementation, such as system quality, information quality, and service quality that are not fully optimal in supporting organizational performance. (Rukhviyanti & Ambarwati, 2023) Therefore, a systematic evaluation approach is needed to assess the success of the Management Information System implementation. This study uses the DeLone & McLean IS Success Model method to analyze the success of information systems based on several main dimensions, namely

system quality, information quality, service quality, user satisfaction, work effectiveness, and its impact on organizational performance. By using this model, this study aims to assess the extent to which the implementation of Management Information Systems can support the improvement of organizational performance at BSI Bandung (Sherlinadya, F., & Rukhviyanti, N., 2025).

### RESEARCH METHOD

This study uses a quantitative method with a survey approach. The quantitative approach is used to measure the relationship between management information system quality variables and organizational structure and performance. (MY Alduaij, 2024). This study aims to test the success rate of implementing a Management Information System using the DeLone & McLean Information System Success Model. This study uses the DeLone & McLean Information System Success Model which consists of variables of system quality, information quality, service quality, user satisfaction, and net profit to assess the impact of implementing a Management Information System on organizational structure and performance.

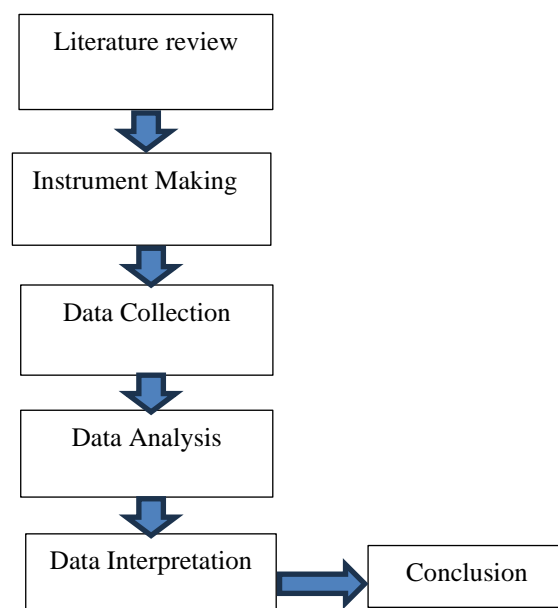
In this study, the population consisted of all permanent employees and expert staff of Daya Bsi Bandung, spanning various departments, with a total of 20 people. The entire population was sampled using a non-probability saturated sampling method. This method refers to selecting all members of the population as samples without any random elements. (Miharja & Rukhviyanti, 2024)

The operators of companies based in Indonesia are the population of this study. According to (Nurul Ichsana, 2023) The population of any research study is the entire collection of individuals or things of interest to the researcher. Employees of a business organization from a specific BSI branch in Kiaracondong were randomly selected to determine the sample size from the population. This survey covered six local government districts. (Sofiyanti et al., 2022).

Using a probabilistic sampling approach, the researchers successfully collected 108 sample elements from the selected local government areas, or 20 respondents from each selected local government area. Interviews, direct observation, and questionnaires were the primary methods used to collect data (Nurul Ichsana, 2022).

1. The research method was carried out in 6 stages, namely starting from literature review, making research instruments, data collection, data analysis, interpretation and conclusions.
2. Literature review  
A literature review is the initial stage of research, which involves conducting a literature study or review of the literature. The purpose of this stage is to collect source data relevant to the research.
3. Instrument Making  
The research instrument used was through the distribution of questionnaires to all users of the Management Information System at Bsi Bandung with a total of 20 users, where the questionnaire questions were arranged based on the D & M IS Success Model dimensions.
4. Data Collection

Figure 1. D&M Succes Model



After understanding the D & M IS Success Model technique, the next stage is to collect data. There are 3 methods used in collecting data in this study, namely (1) interviews, the purpose of the interview is to obtain the most accurate information possible regarding The technique used to obtain information from Management Information System users is by using a questionnaire. The questionnaire questions are structured based on the dimensions of the D&M IS Success Model.

5. Data Analysis

The prepared questionnaire questions were then distributed to respondents. In this study, the respondents were employees of BSI Bandung , which consists of 20 users. After all questionnaire questions were collected, the next step was data processing.

6. Data Interpretation

At this stage, after obtaining the results of the data analysis, input is provided from the correspondent's answers that have been processed using the D & M IS Success Model method.

7. Conclusion

Finally, draw conclusions in the form of results from answers to the use of management information systems.

**Research Instruments**

The research instrument used was through the distribution of questionnaires to all users of the Management Information System at Bsi Bandung with a total of 20 employees, where the questionnaire questions were arranged based on the D & M IS Success Model dimensions as shown in the table.

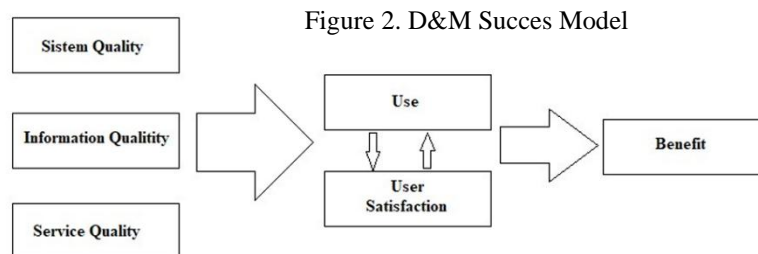
Tabel 1 Questionnaire Questions

Variabele	Indicator	Question
System Quality (Sastradipraja et al., 2025)	Reliability	Management Information Systems rarely experience disruptions during use.
	Ease of Use	The system is easy to learn and use in everyday work.
	Access Speed	The system provides a fast response when I access the data.
	System Security	The system is able to maintain the security and confidentiality of organizational data.
Information Quality (Rohim, 2025)	Completeness of Information	The information generated by the system is comprehensive.
	Accuracy of Information	The information displayed rarely contains errors.
	Timeliness	The system helps provide real-time data.
	Ease of Understanding	The system's information presentation is clear and systematic.
Quality of service (Permatasari et al., 2022)	Technical Support	IT staff are quick to assist users.
	Responsivitas	Users can easily submit system complaints.
	Service Guarantee	The system is reliable in supporting their work.
User Satisfaction (Vatresia & Pasaribu, 2023)	User Satisfaction	The system fits my work needs
	Work Effectiveness	It facilitates work coordination within the organization.
	Work Efficiency	It helps reduce manual work.
Net Profit (Dampak Organis)	Improving Organizational Performance	The system supports management decision-making.
	Operational Efficiency	The system helps reduce operational costs

The data collection process is recognized as a crucial technique in the research process. The study employed quantitative methods, collecting data through face-to-face interviews and questionnaire distribution. The interviews were intended to obtain information directly from employees, while the questionnaire, distributed via Google Forms, contained statements related to the research variables using a Likert scale of 1 to 5. (Miharja & Ruhkviyanti, 2024). This study was conducted at PT. Bank Syariah Indonesia Bandung , Jl Ibrahim Adji No. 435, Bandung City, West Java from February 2026 until completion.

**a. Delone & McLean IS Success Model**

In 1992, DeLone and McLean tried to build a method consisting of 6 dimensions, the results of which concluded that these 6 dimensions build the success of an information system related to (Primadasa et al., 2023)



**b. Data Analysis**

The analysis technique in this study aims to analyze the data that has been answered by the correspondents. At this stage, the Management Information System is also used to calculate the mean (average). The mean can be found using the following equation:

$$X = \frac{\sum Xi}{n}$$

Description : X = average value  
 Xi = data value – i  
 n = number of data

After the mean value is obtained, the average is searched in the form of a percentage of each indicator, this aims to find out the value of each question in each indicator.

$$\text{Average (\%)} = \frac{\text{Average value}}{\text{Number of criteria}} \times 100$$

The values of all intervals in this study can be seen in the table below:

Average score	Criteria
80% - 100%	Very Satisfied
60% - 79,99%	Satisfied
40% - 59,99%	Not at All
20% - 39,99%	Very Dissatisfied
0% - 19,99%	Not at all satisfied

Tabele 2. Criteria Research Interval

The assessment interval of this criteria aims to measure and differentiate between options so that the results obtained can contribute to the objectives.

**RESULTS AND DISCUSSION**

**General Description of Research Object**

PT Bank Syariah Indonesia (Persero) Tbk. is the largest sharia bank in Indonesia which was formed from the merger of three state-owned sharia banks. This bank focuses on banking services based on sharia principles with the support of modern information system technology.

Bsi Bandung is a sub-branch office that carries out banking operational activities such as customer service, financing transactions, and financial administration. The implementation of SIM in this work unit aims to:

- Improve employee work effectiveness
- Accelerate operational processes
- Support managerial decision-making
- Improve organizational performance

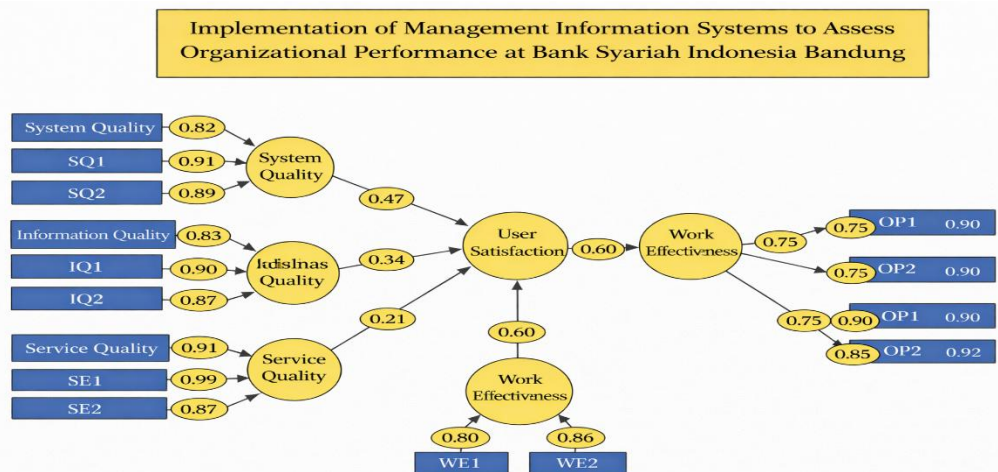
**a. Description of Research Data**

This study used a questionnaire method for 20 respondents who were employees who used management information systems.

**b. Respondent Characteristics**

No.	Item	Description	Quantity
1	Age (Years)	20-30	7
		31-41	8
		41-51	4
		>50	1
2	Gender	Male	13
		Female	7
3	Highest Education	High School	6
		Diploma	-
		Bachelor's Degree	13
		Postgraduate Degree	1
4	Years of Service	<2	5
		3-5	1
		>5	14

Tabele 3. Characteristics of All



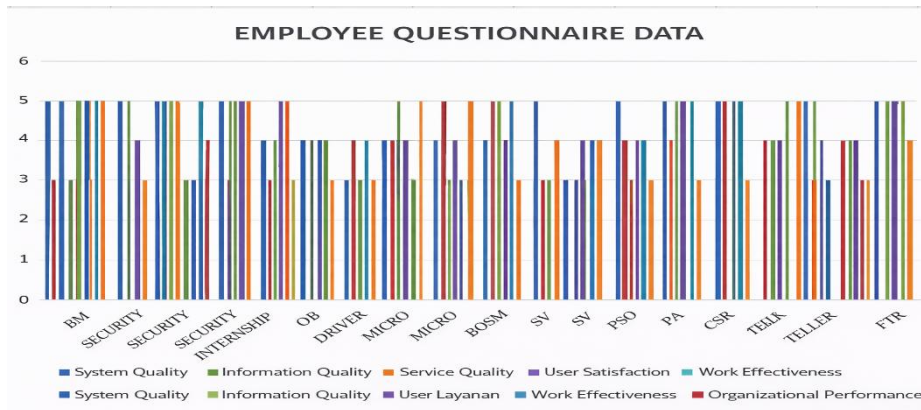


Figure 4. Questionnaire Results for all Employees

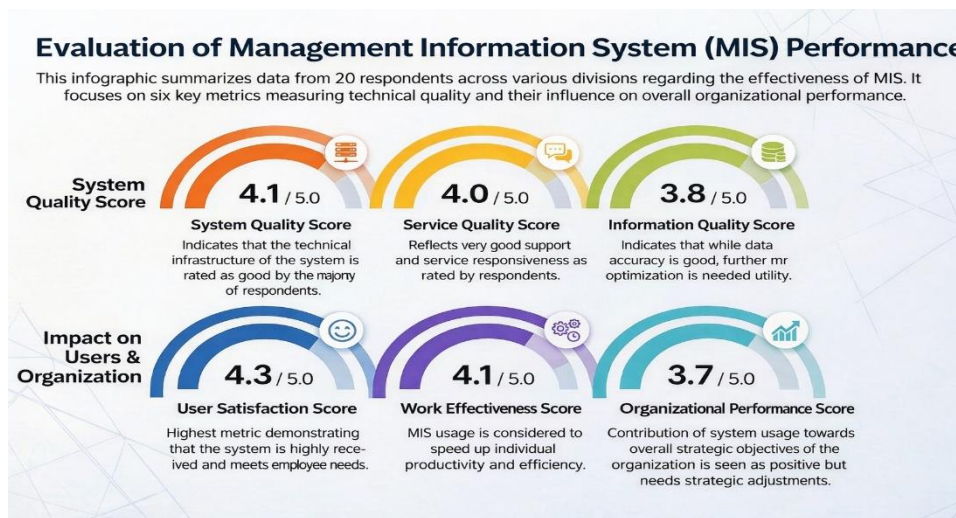


Figure 5. Interview results for all

The majority of respondents are active users of management information systems in their daily operational activities.

**c. Analisis Data**

The following describes this research based on the following formula.

$$\text{Average (\%)} = \frac{\text{Average value}}{\text{Number of criteria}} \times 100$$

**System Quality**

$$\underline{X} = \frac{4.1}{5} \times 100 = 82\%$$

**Information Quality**

$$\underline{X} = \frac{3.8}{5} \times 100 = 76\%$$

**Service Quality**

$$\underline{X} = \frac{4.0}{5} \times 100 = 80\%$$

**User Quality**

$$\underline{X} = \frac{4.3}{5} \times 100 = 86\%$$

**Work Effectiveness**

$$\underline{X} = \frac{4.1}{5} \times 100 = 82\%$$

**Organizational Performance**

$$\underline{X} = \frac{3.7}{5} \times 100 = 74\%$$

Average results :

Variabel	Mean	Presentase	Categori
System Quality	4.1	82%	Very High
Information Quality	3.8	76%	High
Service Quality	4.0	80%	High
User Satisfaction	4.3	86%	Very High
Work Effectiveness	4.1	82%	High
Organizational Performance	3.7	74%	High

Table 4. Calculation Results of All Variables

Based on the results of descriptive statistical calculations, it is known that all research variables are in the high to very high category. The variable with the highest value is **System Quality and User Satisfaction (86%)**

This indicates that the management information system used is:

- Stable
- Easy to use
- Provides employee satisfaction

While the lowest scores are found in:

**Organizational Performance (74%)**

However, it is still in the high category, which means the system continues to contribute positively to increasing work productivity. Based on the results of descriptive statistical analysis using the average percentage formula, it is known that all research variables are in the high category. The system quality and user satisfaction variables have the highest value of 82%, which indicates that the implemented management information system has run well and provided satisfaction to users. Meanwhile, the organizational performance variable has the lowest value of 74%, but is still included in the high category, so it can be concluded that the implementation of the management information system is able to support the improvement of overall organizational performance.

## CONCLUSION

Based on the research results using the DeLone & McLean Information System Success Model, it can be concluded that the implementation of the Management Information System (MIS) at PT Bank Syariah Indonesia Bandung has been successfully achieved. This is demonstrated by all research variables, including system quality, user satisfaction, work effectiveness, and organizational performance, obtaining scores within the high to very high category, with percentage values ranging from 74% to 86%. These findings indicate that the implemented MIS has been able to function effectively and provide meaningful support for employees in carrying out operational activities and achieving organizational objectives.

Among all variables analyzed, user satisfaction obtained the highest score of 86%, indicating that the system implemented by PT Bank Syariah Indonesia Bandung has successfully fulfilled employee needs and expectations in supporting their daily tasks. The high level of user satisfaction reflects that employees perceive the system as beneficial, reliable, and capable of facilitating their work processes. Furthermore, system quality and work effectiveness both achieved a score of 82%, demonstrating that the MIS has provided adequate support in improving employee productivity through its ease of use, system stability, and fast response capabilities.

Although organizational performance obtained the lowest score among the variables, with a percentage of 74%, this value remains within the high category. This finding shows that the implementation of the Management Information System has contributed positively to organizational development, particularly in supporting the achievement of institutional targets, improving service quality, and strengthening business processes within PT Bank Syariah Indonesia Bandung. The existence of an integrated information system has helped the organization improve operational efficiency, accelerate managerial decision-making processes, strengthen coordination between departments, and support the ongoing digital transformation of banking services.

Based on these findings, it is recommended that PT Bank Syariah Indonesia continue to optimize the implementation of its Management Information System by improving information technology infrastructure, strengthening employee digital literacy through continuous training programs, developing system features that can further enhance organizational performance, and improving communication and coordination among stakeholders involved in system implementation. These efforts are expected to ensure that the MIS continues to provide sustainable benefits and contributes to improving organizational competitiveness in the digital banking era.

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